

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 847 200 A1

(12)

**EUROPEAN PATENT APPLICATION**

published in accordance with Art. 158(3) EPC

(43) Date of publication:  
10.06.1998 Bulletin 1998/24(51) Int. Cl.<sup>6</sup>: **H04N 5/926**, G11B 27/034,  
G11B 27/10

(21) Application number: 96932021.7

(86) International application number:  
PCT/JP96/02806

(22) Date of filing: 27.09.1996

(87) International publication number:  
WO 97/13366 (10.04.1997 Gazette 1997/16)(84) Designated Contracting States:  
DE FR GB

(30) Priority: 29.09.1995 JP 252734/95

(71) Applicant:  
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.  
Kadoma-shi, Osaka-fu, 571 (JP)

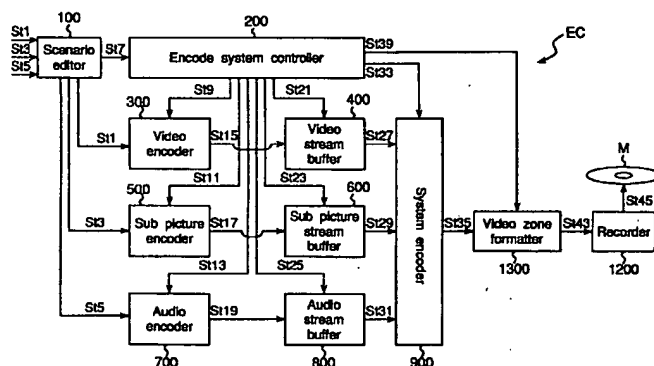
- TSUGA, Kazuhiro  
Hyogo 665 (JP)
- HASEBE, Takumi  
Kyoto 614 (JP)
- MORI, Yoshihiro  
Osaka 573 (JP)
- HAMASAKA, Hiroshi  
Osaka 573 (JP)

(72) Inventors:  
• SATO, Akihiro  
Osaka 571 (JP)  
• HORIIKE, Kazuyoshi  
Kyoto 612 (JP)(74) Representative:  
Eisenführ, Speiser & Partner  
Martinistrasse 24  
28195 Bremen (DE)**(54) METHOD AND DEVICE FOR MULTI-ANGLE CONNECTING AND ENCODING BIT STREAM**

(57) A method and device for interleaving bit stream by which multimedia data including digital picture data, audio data, and sub-video signals are seamless-reproduced by smoothly switching videos and voices to each other without disturbing videos, allowing noise to be contained in voices, and discontinuing voices at angle switching sections during multi-angle reproduction from an optical disk on which multi-media data are recorded. A multi-angle system stream is constituted of a plurality of system streams composed of picture data and audio

data created at different viewing points. In the multi-angle system stream from which a system stream corresponding to an angle can be reproduced at every predetermined unit by freely switching the system stream to another during reproduction, the display time of picture data contained in the system stream corresponding to a angle and the display time of audio data are made equal to each other for every angle at every prescribed unit at which the angle can be switched.

Fig.2



EP 0 847 200 A1